REMARKS

In the Office Aciton, claims 1-20 were initially rejected under §102(e) as being anticipated by Leleu, U.S. Patent Application No. 6,088,687. Applicant respectfully requests reconsideration and allowance of all pending claims in view of the above-amendments and the following remarks.

I. AMENDMENT TO THE SPECIFICATION

The specification is amended on pages 3 and 6 to be consistent with the brief description of the drawings appearing on page 12, lines 4-12.

II. CLAIM REJECTIONS

As mentioned above, claims 1-20 were rejected under §102(e) as being anticipated by Leleu, U.S. Patent No. 6,088,687.

As described in more detail below, Leleu does not disclose a payment token, which "includes, apart from said initial value representing a credit of monetary units, at least one operation adaptation datum . . . ."

Leleu simply discloses a token containing a numerical value corresponding to a toll-unit credit. If authentication proves positive, the device can debit all or a portion of the credit. (Col. 2, lines 7-11 and 18-22). The token has no adaptation datum apart from the numerical value of the toll credit.

1. Background

The Leleu '687 patent appears to be the same specification as the Leleu WO 9733404 publication discussed in the background section of the present application. The Leleu '687 patent therefore represents the prior art that Applicant wished, at the time he filed his application, to improve.

The improvement relates to a process and system for adapting the content and/or the cost of transmission and/or service operations within a data packet transmission network, and particularly, but not exclusively, internet type networks.

The present application, from the middle of page 2, introduces the Leleu patent document as follows. As explained in the document, it seems difficult, if not impossible to implement conventional payment technologies on an internet network for operations carried out on the network. Indeed, an internet network does not have the centralized administration necessary to implement these conventional payment technologies, which mainly consist of billing as a function either of the length of connection between units (for a preset data transmission speed and distance), or of the amount of data exchanged between two units (taking info account the data transmission speed).

For this reason, the current technology of paying for operations carried out on an internet network consists of billing only for access at a physical point on the network. As shown in Leleu patent document, this billing is either at a flat-rate, or it takes into account the amount of data sent to the whole network, or else the totality of the data received from the totality of the network.

Unfortunately, this current payment technology does not allow fair and equitable billing of transmission and/or service operations carried out within the internet network. Indeed currently, the billing of transmission and/or service operations is not a function of the path traversed by and of the transmission speed of the data packets.

Therefore, in Leleu patent documents, a new technology has been proposed (we called, in our specification, token technology), which is based on the insertion of payment tokens in the packet stream and allows each data packet conveyed by the network to settle for itself the cost of a transmission operation relating to its own transport, or the cost of a service operation relating to its own container or content.

The general design of this token technology is summarized in our application from page 3, line 24 to page 5,

line 6. Then it is explained that, this token technology has numerous advantages. In particular, it allows fair and equitable billing of transmission and/or service operations carried out within a data packet transmission network, for example of the internet type. It may also constitute an electronic payment means, associated with the content of the packets, in the network nodes. Indeed, the payment token assigned to each data packet makes it possible to finance any type of operation (transport and/or service) carried out by the destination unit or any network node in which the packet will reside. Token technology provides, optionally, for an upstream adaptation (i.e. in the source unit or in the credit node) of the content and/or the cost of transmission and/or service operations.

To be more exact, token technology, in its current form provides at token creation stage (i.e., before its insertion in a packet), for the credit gateway to calculate numerical value constituting a credit of paying units, which is a function of the number of operations which can be completed with this credit, of the service quality of these operations and of the type of theses operations. In the case of transport operations, the numerical value calculated is for example a function of the packet destination address, the number of nodes passed through and of the data exchange speed. In every case, to the different packets are assigned tokens having different monetary values and calculated in a predetermined way.

Then it is observed that, such an upstream adaptation of the content and/or the cost of transmission and/or service operations is not satisfactory.

Indeed, implementing it within the credit gateway is very complex, since, to create each token, the credit gateway must of necessity be acquainted with and take account of the operation or operations which this token will finance and authorize. This complexity is further increased when the credit

gateway manager is an internet access provider for a plurality of subscribers. Each of the subscribers in fact has his/her own specifics in terms of numbers, service quality and type of operations to be carried out.

Additionally, the implication is that, operations providers (typically the service providers) will continuously inform credit gateway managers of all of the modifications which they intent to bring to the services (operations) which they are able to offer. But this will clearly run counter to the basic desire of service providers to remain as independent as possible of the credit gateway managers (particularly when the latter are internet access providers).

To sum up, with the solution provided in Leleu patent document, making an adaptation of the content and/or the cost of operations currently poses a problem. For this reason and with a view to simplifying settlement, only an implementation with tokens of a fixed purchase value seems actually conceivable at the present time.

2. Present Invention

Given this statement, one of the objectives of the present invention is to provide a process and system constituting an improvement on the token technology discussed above, so that the latter may be used while allowing an easy adaptation of the content and/or the cost of transmission and/or service operations.

Another objective of the invention is to provide such a process and system allowing the operation providers (typically the service providers) to remain as independent as possible of the credit gateway managers (typically internet access providers).

These different objectives are met according to the invention by means of a process, as recited in claim 1, for adapting the content and/or the cost of transmission and/or

service operations carried out within a data packet transmission network, during a session between a source unit and a destination unit interconnected via at least one node of said network, said destination unit and/or said at least one node being used by at least one operator and/or at least one service provider, said process being such that:

in said source unit and/or in at least one node, called a credit node, a credit gateway assigns to each data packet sent by said source unit a payment token which has an initial value representing a credit of monetary units previously acquired from a toll center;

in said destination unit and/or in at least one node, called a debit, located downstream of said at least one credit node, a debit gateway modifies the payment token assigned to each data packet received, so as to reduce said payment token initial value, by an amount representing the cost of the operations to be carried out, for said received packet, by said destination unit and/or said at least one debit node;

said destination unit and/or each debit node, in which is includes a said debit gateway, received from said toll center, for each packet received during said session as financial statement of said representation amount;

wherein (and this part constitutes a significant improvement provided by the present invention to the disclosure of Leleu patent document): at least one said payment tokens includes, apart from said initial value representing a credit of monetary units, at lest one operation adaptation datum allowing said destination unit and/or said at least on debit node to adapt the content of the operations to be carried out and/or the cost actually billed to said source unit and/or to said at least one credit node, in order to carry out said operations.

The general principle of the process recited in claim 1 therefore includes in carrying out a downstream adaptation (i.e.

in the debit node or in the destination unit) of the content and/or cost of the transmission and/or service operations.

In this way, the operations provider (typically the service provider managing the destination unit in which the debit gateway is included) itself manages the content and/or the cost of operations it carries out. It thus has great freedom to customize these operations and/or their modes of billing. It remains independent of the source unit or credit node manager (typically the internet access provider), which merely enhances the payment tokens with relevant data then inserts these payments tokens into the packets.

The operation adaptation data may be inserted in the payment token according to any format type, agreed between the credit gateway manager and the debit gateway manager.

3. Conclusion

Since Leleu does not disclose the adaptation datum recited in independent claim 1, Applicant respectfully requests that the rejection of claim 1 and its dependent claims 2-19 be withdrawn. Dependent claims 2-19 also add further features and elements not disclosed by Leleu. In addition, independent claim 20 includes a similar "adaptation means" element, and is therefore also patentable over the Leleu document.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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